Locking Plungers

**Steel / Stainless Steel,
with Cardioid Curve Mechanism
(Retractable Pen principle)**

SPECIFICATION

Types

Type **A**: With plastic knob, without lock nut
Type **AK**: With plastic knob, with lock nut
Type **AN**: With stainless steel knob, without lock nut
Type **AKN**: With stainless steel knob, with lock nut

Steel
Blackened

- Plunger pin
  Steel, nitrided
- Compression spring
  Stainless steel AISI 301

Stainless steel AISI 316 **A4**

- Plunger pin
  Stainless steel AISI 316
  Case hardened
- Compression spring
  Stainless steel 316Ti

Knob (type A / AK)
Plastic (Polyamide PA)

- Black, matte finish
- Not removable

Knob (type AN / AKN)
Stainless steel AISI 316
Not removable

INFORMATION

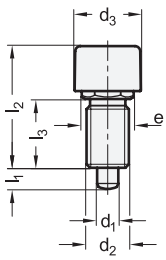
Locking plungers GN 514 feature a cardioid curve mechanism based on the principle of a retractable pen. They offer very ergonomic operation that requires only repeated pressing of the knob. Thanks to their functional principle, they are well suited for use in tight conditions and are also easy to protect against improper operation, if necessary.
First the plunger pin is brought into the protruding position by pressing the knob. In this position, the cardioid curve mechanism automatically engages to lock the part. Pressing the knob again unlocks the mechanism since the plunger pin retracts automatically by spring force once the button is released. The plunger pin must not be subjected to any axial forces and must move easily.
The stainless steel design is suitable for applications in highly corrosive environments thanks to the A4 materials used.

- Range of indexing plungers (see page 738)

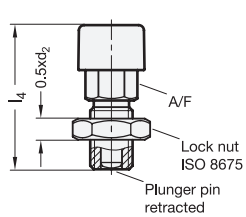
TECHNICAL INFORMATION

- Load Rating Information (see page A35)
- ISO-Fundamental Tolerances (see page A21)
- Plastic Characteristics (see page A2)
- Stainless Steel Characteristics (see page A26)

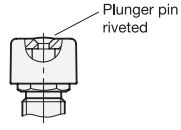
Type **A**

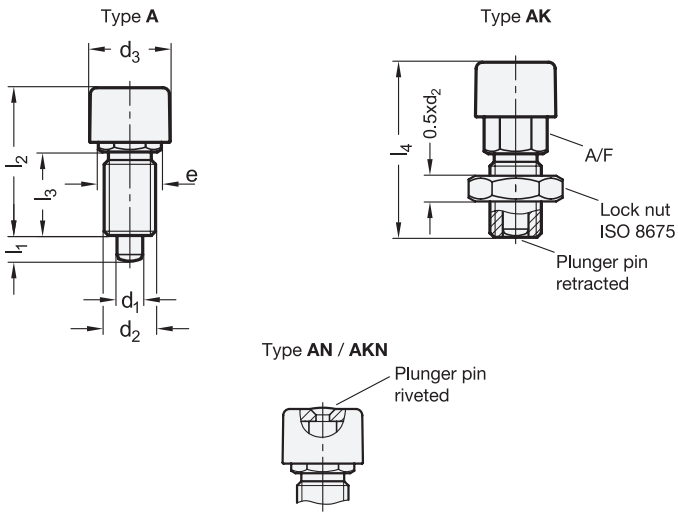


Type **AK**



Type **AN** / **AKN**





*Complete with type index of locking plungers

A **AK**

GN 514

Description	d1 Pin -0.02/ -0.05 Bore H7	d2	d3	e	l1	l2	l3	l4	l5	A/F	w1	w2	Spring load in N ≈ initial	Spring load in N ≈ end	⚖
GN 514-6-*	6	M 12 x 1.5	19	15	6	38	19.5	44.5	9	13	3	9	8.5	25	28
GN 514-8-*	8	M 16 x 1.5	25	19	8	46	25.5	54.5	11	17	3	11	18	44	46

Weight type A

*Complete with type index of locking plungers

A **AK** **AN** **AKN**

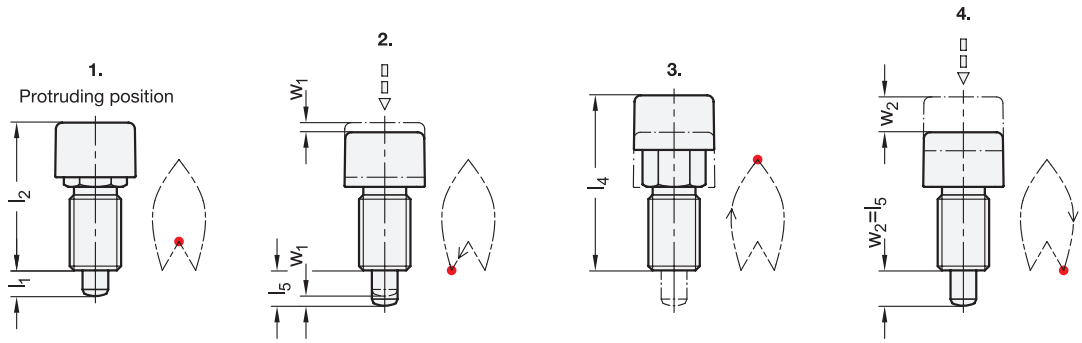
GN 514-A4 **STAINLESS STEEL**

Description	d1 Pin -0.02/ -0.05 Bore H7	d2	d3	e	l1	l2	l3	l4	l5	A/F	w1	w2	Spring load in N ≈ initial	Spring load in N ≈ end	⚖
GN 514-6-*-A4	6	M 12 x 1.5	19	15	6	38	19.5	44.5	9	13	3	9	8.5	25	31
GN 514-8-*-A4	8	M 16 x 1.5	25	19	8	46	25.5	54.5	11	17	3	11	18	44	68

Weight type A

Description of function

1. In the protruding position, the plunger pin protrudes by distance l_1 and is locked.
2. The knob is pressed by distance w_1, thereby unlocking the plunger pin.
3. Then the plunger pin is retracted by the compression spring and held in the retracted position.
4. The knob is pressed by distance w_2 and locks again in the protruding position after release.



Application examples